

Please type a plus sign (+) inside this box → ☒Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
PTO/SB/05 (03-01)

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<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> (Only for new nonprovisional applications under 37 CFR 1.53(b))		Attorney Docket No. 5014C1	
		First Inventor Gennady A. Denisov et al.	
		Title	A System and Method for Improving the Accuracy of DNA Sequencing and Error Probability Estimation Through ...
		Express Mail Label No. EV 320 407 318 US	

<b>APPLICATION ELEMENTS</b> See MPEP chapter 600 concerning utility patent application contents.	<b>ADDRESS TO:</b> Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450
-----------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 47]  
(preferred arrangement set forth below)
- Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 12]
5. Oath or Declaration [Total Pages 4]
- a. ☐ Newly executed (original or copy)
- b. ☒ Copy from a prior application (37 C.F.R. § 1.63(d))  
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☐ Computer Readable Copy (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ paper
- c. ☐ Statement verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. §3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Certified Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Rule 1.53(b) Transmittal

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: 09/ 658,161 filed September 8, 2000

Prior application information:

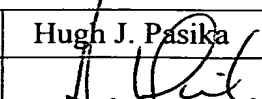
Examiner: Brusca, John S.Group Art Unit: 1631

For CONTINUING OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

☒ Customer Number or Bar Code Label **22896** or ☐ Correspondence address below

Name	Hugh J. Pasika				
Address	Applied Biosystems				
	850 Lincoln Centre Drive				
City	Foster City	State	California	Zip Code	94404
Country	US	Telephone	650-570-6667	Fax	650-638-6677

Name (Print/Type)	Hugh J. Pasika	Registration No. (Attorney/Agent)	54,362
Signature		Date	12/3/03

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**FEE TRANSMITTAL  
for FY 2004**

Patent fees are subject to annual revision.

**Complete if Known**

Application Number	To be assigned
Filing Date	CPA November 26, 2003 (herewith) December 4, 2003
First Named Inventor	Gennady A. Denisov et al.
Examiner Name	To be assigned
Group Art Unit	To be assigned
Attorney Docket No.	5014C1

**TOTAL AMOUNT OF PAYMENT (\$ 770.00)****METHOD OF PAYMENT (check one)**

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

Deposit Account Number	01-2213
Deposit Account Name	Applied Biosystems

- ☒ Charge any Additional Fee Required Under 37 CFR 1.16 and 1.17  
☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ **Payment Enclosed:**  
☐ Check ☐ Credit card ☐ Money ☐ Other Order

**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	770.00
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(\$ 770.00)</b>

**2. EXTRA CLAIM FEES**

Total Claims	Extra Claims	Fee from below	Fee Paid
1	-20**= 0	18	0
1	-3**= 0	86	0
Multiple Dependent			0

\*\*or number previously paid, if greater; For Reissues, see below

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2) (\$ 0)****FEE CALCULATION (continued)****3. ADDITIONAL FEES****Large Entity Small Entity**

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet.	
1053 130	1053 130	Non-English specification	
1812 2520	1812 2520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1840*	1805 1840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1480	2254 740	Extension for reply within fourth month	
1255 2010	2255 1005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1510	1451 1510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1330	2453 665	Petition to revive - unintentional	
1501 1330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee for provisional applications	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify) _____			

\* Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$ 0)****SUBMITTED BY**

Name (Print/Type)	Hugh J. Pasika	Registration No. (Attorney/Agent)	54,362	Complete (if applicable)	
Signature		Telephone	650-554-2257	Date	12/3/03

**WARNING:**

Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

CERTIFICATION UNDER 37 CFR 1.10

Express Mail Number: EV 320 407 318 US

Date of Deposit: December 4, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Cheri Gomez  
(Print Name of Person Mailing Application)

Cheri Gomez  
(Signature of Person Mailing Application)

**Docket No. 5014C1**

**Transmittal of Continuation Patent Application  
For Filing Under 37 CFR 1.53(b)**

PRIOR APPLICATION:

Examiner: John S. Brusca

Art Unit: 1631

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is a request for filing a ☒ continuation ☐ divisional application under 37 CFR 1.53(b), of pending prior application serial no. 09/658,161 filed on September 8, 2000 by Gennady A. Denisov, Alan B. Arehart, Michael D. Curtin entitled

**A System and Method for Improving the Accuracy of DNA Sequencing and  
Error Probability Estimation Through Application of a Mathematical  
Model to the Analysis of Electropherograms**

1. Enclosed are:

- ☒ One stamped, self-addressed postcard for PTO datestamp.
- ☒ Certificate of Express Mail.
- ☒ One utility patent application containing text pages 1 - 47 and ☒ 12 sheets of ☒ formal ☐ informal drawings.
- ☒ Application Data Sheet.
- ☒ Copy of executed Declaration of Inventorship from parent application serial no. 09/658,161.
- ☐ Sequence Listing printout, Request to Use from prior application, and matching Declaration.
- ☐ A Preliminary Amendment.
- ☐ A new Power of Attorney.

2. Amendment

- ☐ Please enter the enclosed Preliminary Amendment before calculating the filing fee. It is understood that only amendments reducing the number of claims will be entered for this purpose.
- ☒ Please cancel original claims 2-44, inclusive, before calculating the filing fee. (At least one original independent claim should be retained for filing purposes.)
- ☐ Amend the specification by inserting cross-reference to related applications paragraph.

3. Extension of Time

- ☐ A petition for extension of time has been filed in the parent to extend the pendency of the parent to \_\_\_\_\_ (copy enclosed).

- ☒ **Conditional Petition for Extension of Time:** An Extension of Time is requested to provide for timely filing *if* required to establish copendency with the parent after all papers filed herewith have been considered.

4. Prior Documents Still in Effect

- ☒ This application and parent application Serial No. 09/658,161 filed September 8, 2000 are assigned of record to Paracel, Inc.

- ☒ Power of attorney in the above-identified prior application is to Hugh J. Pasika, Reg. No. 54,362, and the other attorneys or agents identified therein.

5. Fees

The filing fee is calculated below taking into account any amendments in section 2 above:

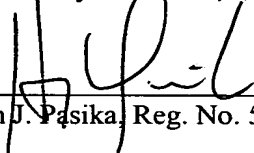
FOR	NUMBER FILED	NUMBER EXTRA	RATE	FEE
TOTAL CLAIMS	1 - 20	0	X \$18	\$ 0.00
INDEPENDENT CLAIMS	1 - 3	0	X \$86	\$ 0.00
	BASIC FEE			\$ 770.00
	Multiple Dependency Fee If Applicable \$290.00			
	Total			
	50% Reduction for Independent Inventor, Non-profit Organization or Small Business Concern			
	TOTAL FILING FEE			\$ 770.00

- ☒ The Commissioner is hereby authorized to charge the filing fee, any deficiency in fees under 37 CFR 1.16 and 1.17, or any other fees necessary for timely filing of this application, or credit any overpayment to Deposit Account No. 01-2213. A duplicate copy of this sheet is enclosed.

☐ A check in the amount of \$ \_\_\_\_\_ is enclosed.

- ☐ Filing fee to be submitted in response to anticipated receipt of Notice to File Missing Parts.  
**DO NOT CHARGE DEPOSIT ACCOUNT**

Respectfully submitted,

  
\_\_\_\_\_  
Hugh J. Pasika, Reg. No. 54,362

Dated: 12/3/03

**Correspondence Address:**

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